The Burden of Diabetes in Kansas

Kansas Diabetes Action Council

Ensuring Kansans live free of diabetes and its complications.

Diabetes in the United States and Kansas: how many and who is at increased risk?

- According to the most recent CDC estimates,[1] 24 million U.S. children and adults, or 7.8% of the population, have diabetes – and among them, almost 6 million are undiagnosed. Among people who are 60 and over, 23% have diabetes. This age-group accounts for about half of all persons with diabetes in the U.S., suggesting the burden of diabetes will continue to grow as our population ages.

KANSAS

- About 8.5% of Kansas adults – roughly 180,000 – have been diagnosed with diabetes. An additional 120,000 adult Kansans have undiagnosed diabetes.[2] The prevalence of doctor-diagnosed diabetes is 14.8% for adults ages 55-64 years and 19.4% for those 65 years and older.[3]

- The prevalence of diabetes is associated with socioeconomic factors such as income and education. About 11.1% of Kansas adults whose annual household income is less than $50,000 have diabetes versus 6.2% for those with an income higher than $50,000. The prevalence of diabetes is also higher for adult Kansans who do not have a college degree (9.7%) compared to those who have graduated from college (6.4%).[3]

- Diabetes is more prevalent in certain population subgroups. In 2009, the age-adjusted prevalence of diagnosed diabetes was higher among non-Hispanic African Americans (14.3%), non-Hispanic persons of other race groups or multiple races (11.3%) and Hispanics (13.7%) as compared to non-Hispanic whites (7.6%).[3] The age-adjusted prevalence of diabetes among Native American groups is 15.3%.[4]

- Diabetes is the most common cause of kidney failure in Kansas. In 2009 there were 816 new cases of end-stage renal disease (ESRD) in Kansas, and diabetes was the primary cause for nearly 46% of those new cases.[5]

Costs of Diabetes to the U.S. and to Kansas

- According to the American Diabetes Association, the estimated cost in 2007 for the U.S. was $174 million (a 32% increase from 2002), including $116 billion in excess medical expenditures and $58 billion in reduced national productivity.[6] According to the Lewin Group, however, costs could be well over $218 billion when costs are added for those not yet diagnosed ($18 billion), those who have diabetes temporarily during pregnancy (gestational diabetes) ($636 million), and those who have pre-diabetes ($25 billion).[7]

- Based on national estimates for diabetes-related medical expenditures and productivity losses, the estimated cost of diabetes in Kansas was over $1.5 billion in 2007.[8]

The Role of Obesity in Diabetes

- The major defining risk factor for type 2 diabetes is obesity. Numerous studies demonstrate the contribution of obesity to the development of insulin resistance and diabetes, as well as to cardiovascular diseases that are commonly associated with diabetes. Overall, obese people may have as much as eleven times the risk of diabetes as those who are not obese.[9]

- The prevalence of obesity (BMI at or above 30) in the U.S. has increased dramatically over the past twenty years. The obesity rate for adult Kansans has doubled in the last 17 years, increasing from 13.1% in 1992 to 28.8% in 2009. In addition, an estimated 12.4% of high school students in Kansas are overweight. [10]

Challenges for Kansas Physicians

As a chronic disease, diabetes presents very real challenges for physicians. Because there are few endocrinologists in Kansas who specialize in diabetes (under 12 by latest counts) – and most of them are in population centers – 25% to 35% of cases in Kansas primary care practices are devoted to diabetes care, according to recent focus groups conducted throughout the state by the University of Kansas Medical Center. Physicians surveyed cited training and support in the diagnosis and management of diabetes as their number one need. **Why does this matter? Estimates indicate that in 2001 two-thirds of national in-patient hospital costs for persons with diabetes could have been averted had those patients received appropriate primary care![11]**

References

[1]CDC 2007 National Diabetes Fact Sheet: http://www.cdc.gov/diabetes/pubs/pdf/ndfs_2007.pdf

[2]Based on the estimate that 40% of diabetes is undiagnosed; Cowie et al. (2009). Full accounting of Diabetes and Pre-Diabetes in the US Population in 1988-1994 and 2005-2006. Diabetes Care 32(2): 287-294.

[3]Kansas Department of Health and Environment, 2009 Behavioral Risk Factor Surveillance System (BRFSS)

[4]Diabetes Program, Prairie Band Potawatomi Health Center, 2009.

[5]End-State Renal Disease (ESRD) – 12, Network Coordinating Council. Heartland Kidney Network 2009 Annual Report. http://www.heartlandkidney.org/information/annual_reports/Annual%20Report2009.pdf

[6]ADA (2008). Economic Costs of Diabetes in the U.S. Diabetes Care 31(3): 1-20.

[7]http://www.msnbc.msn.com/id/27783488/

[8]Estimation based on the proportion of all persons with diabetes in the U.S. that live in Kansas.

[9]See, for example, Kahn SE, Hull RL, Utzschneider KM (2006). Mechanisms linking obesity to insulin resistance and type 2 diabetes. Nature 44: 840-846.

[10]Kansas Department of Education, 2009 Youth Risk Behavior Survey. Overweight includes individuals in the 95th percentile or higher for body weight. http://www.kshealthykids.org/KSCH_Docs/YRBS/09_yrbs_fact_sheets.pdf

[11]Agency for Healthcare Research and Quality, Healthcare Cost and Utilization Project (HCUP), AHRQ Publication No. 05-0034, January 2005.